

REMARKS

This Amendment and Response is responsive to the July 23, 2004 Office Action. In that action, claims 1-6 were rejected under 35 U.S.C. §102(e) as being anticipated by Pettitt, et al. (USPN 6,256,073) and claims 7-17 were rejected under §102(e) as being anticipated by Sharp, et al. (USPN 6,417,892)

Claims 1 and 7 have been amended to more clearly define the invention and further distinguish over the cited prior art. New dependent claim 18-20 and independent claim 21 have been added. Claims 18-20 are believed to be patentable because of their dependence on an allowable independent claim and because of the additional limitations contained in these claims. Claim 21 is believed to be patentable because of the limitation of “the fourth segment being transmissive of non-uniform amounts of red, green, and blue light”

Pettitt discloses a display system using a color wheel. Various embodiments of color wheels are disclosed. Table 1 discloses the spectral transmission characteristics of three different segments of a color wheel. The blue segment is only defined at its upper end, as it is implied that it is transmissive from that upper end down to the lower end of the visible spectrum. The red segment is only defined at its lower end, as it is implied that it is transmissive from that lower end up to the upper end of the visible spectrum. The green segment is defined at its lower end (referred to as shortwave) and its upper end (referred to as longwave). Pettitt also discloses a 4-segment color wheel in Figure 4 and column 5, lines 6-9. Additional text at column 5, lines 10-17 states that two of the segments of the color wheel in Figure 4 could be of the same color. It is also stated that alternatively the fourth segment could be used to transmit white light to increase image brightness.

As amended, claim 1 defines a color sequencing system with a color wheel having four segments, with *a fourth segment being broadly transmissive across the wavelength spectrum of visible light* while the broadly-transmissive segment has a non-uniform transmittance across the visible light spectrum. Pettitt discloses only segments that are transmissive across a single color band or segments that are *uniformly* transmissive across the entire visible spectrum (i.e. white segments). Thus, it is believed that none of the prior art, including Pettitt, discloses a segment that is broadly, yet non-uniformly, transmissive across the visible spectrum. For this reason, it is respectfully submitted that claim 1 and dependent claims 2-6, 18, and 19 are patentable.

Sharp discloses a display system with a sequentially-operated color-selective light modulator (CSLM) having red, green, and blue transmitting states. In column 45, lines 25–32, Sharp discloses that “the light source 1500 and the [CSLM] sequencer 1550 sequentially illuminate the liquid crystal display 1560 with red, green, and blue light. The liquid crystal display 1560 is sequentially driven with red, green, and blue image information in synchronism with the red, green and blue illumination from the light source 1500 and the color sequencer 1550.” There is no disclosure by Sharp of supplying spectrally-broad light simultaneously including red, green, and blue light, nor is there any disclosure by Sharp of addressing the liquid crystal display with an image corresponding to the spectrally-broad light.

As amended, claim 7 includes “providing spectrally-broad light during a fourth time period from the combination of the light source and the color sequencer while the spatial light modulator displays an image corresponding to that spectrally-broad light, wherein while providing the spectrally-broad light the color sequencer has a transmittance that is not uniform across its wavelength band, wherein the spectrally-broad light includes simultaneous and substantial amounts of red, green, and blue light” Neither Sharp nor any of the other cited art

disclose or suggest these limitations. For these reasons, it is respectfully submitted that claim 7 and dependent claims 8-17 and 20 are patentable.

In addition, should the Examiner disagree, it is respectfully requested that more descriptive reasons be provided for such rejections as given for claim 10 since it is not readily understood why it is inherent that non-uniform input light will result in the sequencer attenuating some of the light. Further, as to claim 16, reference to the rejection of claim 7 does not show why the combination of the limitations found in claims 7, 15, and 16 are found in Sharp.

Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

MARSH FISCHMANN & BREYFOGLE LLP

By: 

Robert G. Crouch
Registration No. 34,806
3151 South Vaughn Way, Suite 411
Aurora, Colorado 80014
(720) 562-5506

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